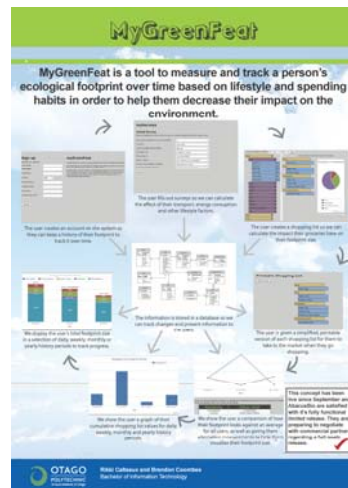
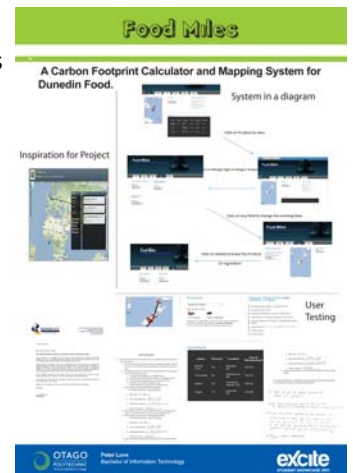


## Information Technology Projects 2009-2011

*myGreenFeat* has addressed the problem of there being no way to track your ecological footprint over time. *myGreenFeat* allows a user to track how much impact their shopping for food and change their habits to help the environment. It has been available for use since September 2011 (**AbacusBio** is now in the process of taking to market). IN700 2011



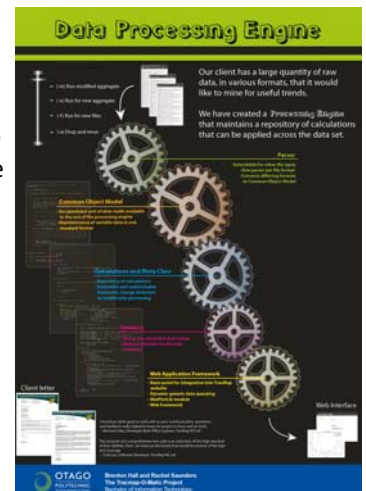
*Dunedin Food Sourcemap* - A web based tool that determines the carbon emissions for food travelled over New Zealand to Dunedin (for the **Dunedin City Council Community Resilience Forum**). IN700 2011



A collection of mobile applications designed and implemented to help the wider Dunedin community to give and receive information, to and from the **Dunedin City Council**. Both of these applications are in use by the DCC, and published by them. IN700 2011



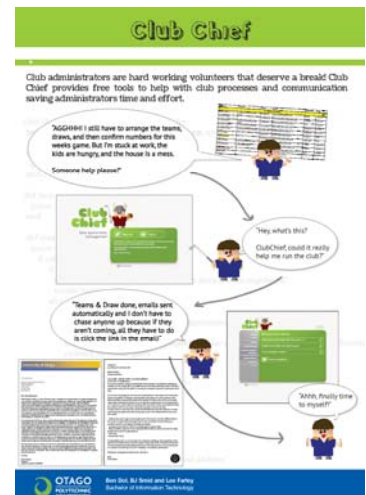
*Tracmap* has a large quantity of raw data in various formats from completed jobs. The business would like to mine this data for useful trends. We have created a *Processing Engine* that maintains a repository of investigative calculations that can be applied across their data set. This system is in use by *Tracmap*. IN700 2011



High Performance Athletes must maintain a close relationship with coaches and scientists. *Athlete Monitoring App* is an iOS solution for **High Performance Sport NZ** for communicating vital training progress, and health information. It has been in use since July, with numerous athletes, and their respective coaches, across seven sporting codes. IN700 2011



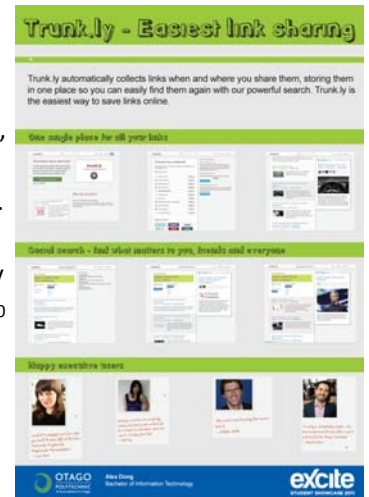
*Club Chief* provides a free service to aid hard working volunteers run their clubs by reducing the time and effort required to complete club administration tasks. The students (now graduates, are continuing this development). IN700 2011  
Entrepreneurial (in association with Audacious)



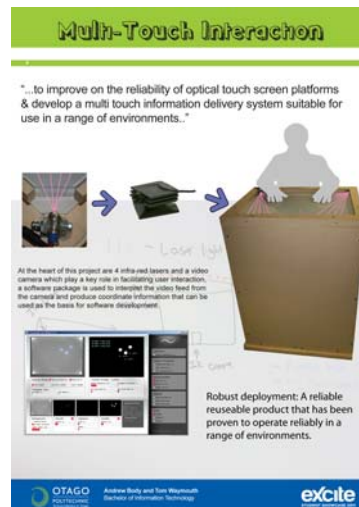
**FishBucket** is a set of useful tools to assist in the establishment of a fish data business. (Note: this entrepreneurial development won the National Business Review Audacious Award). Commercial development is continuing. IN700 2011



Alex Dong's entrepreneurial **trunk.ly** project has addressed the opportunity of sharing links across different social networks, and recall it using search. This project was sold internationally. Alex is now employing developers in Dunedin. (trunk.ly was a finalist in Audacious) IN700 2011



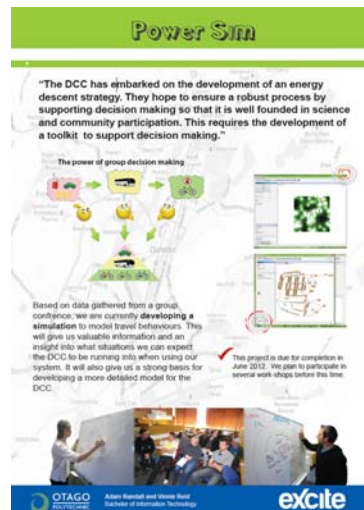
A large **multi-touch screen** to facilitate the development of museum exhibits. The multi-touch system is proven robust in challenging light environments. The system is being used to develop exhibits for the **Gasworks Museum** and other applications. IN700 2011



Multi-platform mobile application development for the BIS department at the **Dunedin City Council**. The mobile applications are to be multi-platform and have geo-location and augmented reality built-in. IN700 2011/12



Modelling tool to support development of **energy descent strategy** for the Dunedin City Council (**Community Resilience Forum**). IN700 2011/12



Entrepreneurial **Fitness Freaks** is an online fitness application that will eventually evolve into a society where users can motivate, compete, compare and buy products in an easy to use layout. IN700 2011/12

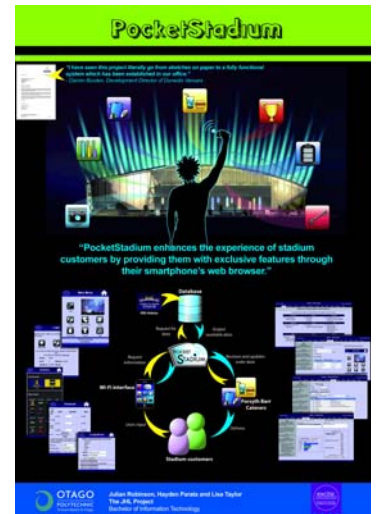




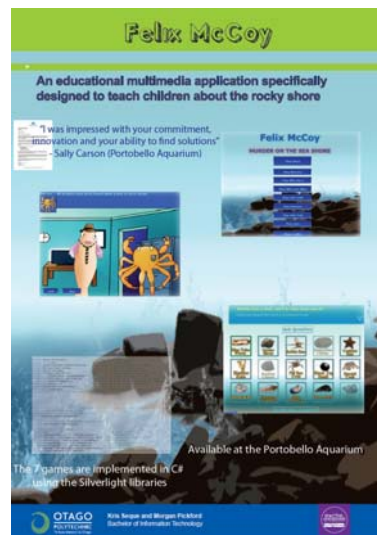
Stemming from our Simpa development, *Arai te Uru* is an interactive iPhone application that uses augmented reality technology that helps users discover, locate and visit Maori related destinations while at the same time going beyond the boundaries of technology and educating users with rich media. This project has directly lead to work in this field for these students and to further projects with **Kuma and the Combined Runaka**. The *iCampus* system developed as part of this project won a national award. IN700 2010



*PocketStadium* enhances the experience of stadium customers by providing them with exclusive features through their smart phone. It is tested and packaged ready for installation at the Forsyth Barr Stadium (for **Dunedin Venues Management**). IN700 2010



*Felix McCoy* is an educational multimedia application specifically designed to teach children about the New Zealand rocky shore life. This system complements *Marine Quest* (developed by us in 2006) – both products are in active use daily at the **Portobello Marine Aquarium**. IN700 2010.



This *Navigation* exhibit is an educational tool built for the **Otago Museum**. It was made for the purpose of educating children in the process of determining position using a sextant. IN700 2010.



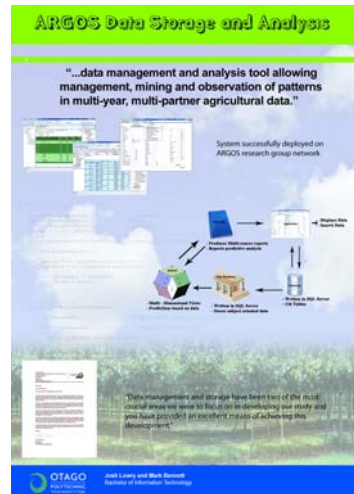
*Dairy Broker* has proven to **Fonterra** the effectiveness of a system to support their model of layered interactions between customers, distributors and salespeople. It is the basis for a larger development now underway. IN700 2010



Develop information and donation web system (web, facebook, paypal, twitter) for **educatingcambodia.com** IN512 2011/12



ARGOS is a multi-institutional programme that has collected agricultural information for six years, we have deployed *ARGOS data mining software* allowing ARGOS members to manage, mine and predict outcomes based on the data set. (**ARGOS/Centre for Sustainability: Agriculture, Food, Energy, Environment**). These graduates were employed by AbacusBio.



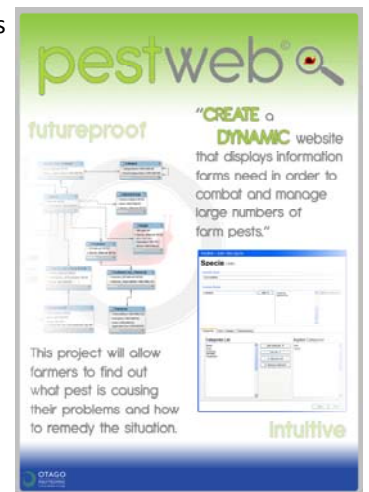
Farmwise is a web-based 2D virtual farm showing agriculture students the flow on effects of management decisions on the farm and surrounding environment. For **ARGOS/Centre for Sustainability: Agriculture, Food, Energy, Environment**. IN700 2009



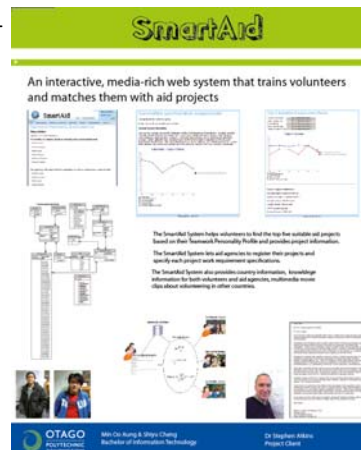
eHeritage Dunedin - an interactive 3D model engine, powered by a database of varied historical resources, has been deployed at the **Settlers Museum** (to be populated and exhibited as a time-based representation of Dunedin). IN700 2009



Pestweb for **AbacusBio** provides a system that stores information about pests and allows farmers to interact with the information in an intuitive and easy manner. AbacusBio employed these graduates to continue this development. IN700 2009



**SmartAid** An interactive, media-rich web system that trains volunteers and matches them with aid projects. For **Rotary International** IN700 2009



**Antwall** is an interactive virtual ant colony display to attract more visitors into a lightly used area of the **Otago Museum**. It has been in continuous use since June 2009. (Note this project was Awarded Excellence in Student Research at the 2009 NACCQ conference). IN700 2009



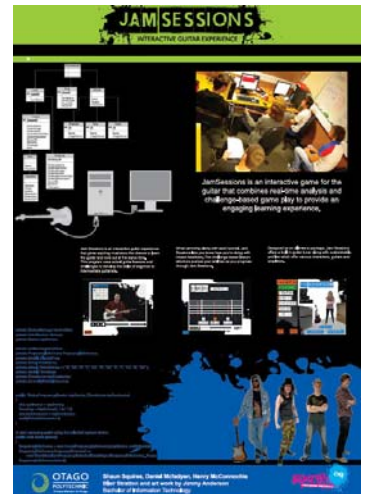


Development of a *virtual catchment model* and community website for Kaikorai Stream.

**Kaikorai College** (Dr Simon MacMillan)/ **Otago Regional Council** IN700 2009



**Guitar warriors.** An interactive educational guitar teaching tool. This uses a real guitar that sends a digital signal via USB into the computer. Specially made software determines the correct pitch and timing of the users input and provides immediate feedback. The goal is to educate musicians to further their ability through progressive learning. IN700 2009 (Entrepreneurial - in association with Audacious).



**Cityscape:** An immersive attraction for the **Settlers Museum** that allows visitors to explore areas and express their creativity, building a community narrative. (Note this project was Awarded Excellence in Student Research at the 2010 NACCC conference).



A **GPS based virtual walking tour** of central Dunedin Historical Landmarks. **Southern Heritage Trust/DCC.**



An **eTraining System** for the staff at **Dunedin Casino** to facilitate training in identification and management of potential problem gamblers, and to monitor and record this training. IN700 2008/9



**Hoofprint** is a carbon emissions management system for agriculture. **AbacusBio** IN700 2008/9

